

REVISED EXHIBIT A

Disputed Terms for U.S. Patent No. 5,819,292			
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence
4, 20	"consistency point"	<p><u>PROPOSED CONSTRUCTION:</u> A set of blocks on disk, rooted by a "root inode" (as construed herein), that includes all the blocks required for the data and file structure of a "file system" (as construed herein).</p> <p><u>INTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> • See Abstract; 4:7-19; 11:6-27; 11:62-14:21; 15:29-17:63; 20:23-31; Figs. 5-6, 16 and 17A-17L and accompanying text; Jan. 28, 1995 Amendment and Response at 16. <p><u>EXTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> • Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. • NetApp reserves the right to rely on any evidence identified by Sun. 	<p><u>PROPOSED CONSTRUCTION:</u> "the set of self consistent blocks on a disk that is rooted by a root inode."</p> <p><u>EVIDENCE:</u></p> <ul style="list-style-type: none"> • '292 Patent, Abstract; Col. 4:11-14; Col. 6:64-67; Col. 7:17-27; Col. 11:66-18:48; Col. 20:64-21:24; Col. 22:18-23:18; claims 2, 4, 20; Figs. 2, 3, 5, 6, 17A-L and accompanying description. • '292 Patent Prosecution History: Amendment and Response filed on or about December 29, 1994, and references cited therein. • '292 Patent Prosecution History: Information Disclosure Statement filed 9/1/1995 and references cited therein. • '292 Patent Prosecution History: Office action mailed February 10, 1997 and references cited therein. • '292 Patent Prosecution History: Submission filed on or about May 7, 1997 and references cited therein. • Testimony by Sun's expert, Dr. McKusick, concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. • Sun reserves the right to rely on any evidence identified by NetApp.
4	"file system information structure"	<p><u>PROPOSED CONSTRUCTION:</u> A data structure containing information about the layout of a file system.</p>	<p><u>PROPOSED CONSTRUCTION:</u> "data structure that contains the root inode of a file system in a fixed location on disk"</p>

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Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence
		<p><u>INTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> • See 9:22-50; 10:57-11:27; 13:63-14:10; 14:23-15:27; 18:50-64; Figs. 15-16, 17A-17L, 20A-20C, 21A-21F and 22 and accompanying text. <p><u>EXTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> • Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. • NetApp reserves the right to rely on any evidence identified by Sun. 	<p><u>EVIDENCE:</u></p> <ul style="list-style-type: none"> • '292 Patent, Col. 4:14-19; Col. 9:33-35; Col. 10:57-11:5; Col.13:15-21; Col.13:63-14:10; Col.14:34-15:27; Col.15:62-16:9; Col.17:41-64; Col.18:50-19:12; Col. 20:23-30; Col.23:10-18; claims 2, 4, 5 7; Figures 2, 3, 4A-4D, 5, 15, 16, 17B, 20A, 20B, 20C, 21F and accompanying description. • '292 Patent Prosecution History: Amendment and Response filed on or about December 29, 1994, and references cited therein. • '292 Patent Prosecution History: Information Disclosure Statement filed 9/1/1995 and references cited therein. • '292 Patent Prosecution History: Office action mailed February 10, 1997 and references cited therein. • '292 Patent Prosecution History: Submission filed on or about May 7, 1997 and references cited therein. • Testimony by Sun's expert, Dr. McKusick, concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. • Sun reserves the right to rely on any evidence identified by NetApp.
8	"meta-data for successive states of said file system"	<u>PROPOSED CONSTRUCTION:</u> Information that describes successive "states of a file system" (as construed herein).	<u>PROPOSED CONSTRUCTION:</u> "a block map file for recording snapshots of the file system"

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Disputed Terms for U.S. Patent No. 5,819,292			
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence
		<p><u>INTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> See 5:48-59; 9:19-11:28; 13:3-62; 17:9-55; 20:63-23:18; Figs. 5-7, 11A-11D, 12, 13A-13B; 17A-17L and 21A-21F and accompanying text. <p><u>EXTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. NetApp reserves the right to rely on any evidence identified by Sun. 	<p><u>EVIDENCE:</u></p> <ul style="list-style-type: none"> '292 Patent, Col. 5:50-60; Col. 9:50-10:18; Col. 12:9-24; Col. 13:2-14; Col. 13:22-14:21; Col. 16:22-41; Col. 18:8-48; Col. 20:15-22; Col. 20:31-62; Col. 22:25-23:9; claims 2, 3, 8; Figs. 2, 3, 4A-D, 5, 6, 7, 11A-D, 16, 17A-D, 22 and accompanying description. '292 Patent Prosecution History: Amendment and Response filed on or about December 29, 1994, and references cited therein. '292 Patent Prosecution History: Information Disclosure Statement filed 9/1/1995 and references cited therein. '292 Patent Prosecution History: Office action mailed February 10, 1997 and references cited therein. '292 Patent Prosecution History: Submission filed on or about May 7, 1997 and references cited therein. U.S. Patent No. 7,174,352. Testimony by Sun's expert, Dr. McKusick, concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. Sun reserves the right to rely on any evidence identified by NetApp.
4, 8	"nonvolatile storage means"	<p><u>PROPOSED CONSTRUCTION:</u> A storage device that can retain information in the absence of power.</p> <p><u>INTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> See 15:16-27; 5:48-59; Jan. 28, 1995 Amendment and Response at 16. 	<p>This limitation is a means-plus-function limitation governed by 35 U.S.C. §112, paragraph 6.</p> <p><u>Function:</u> storing blocks of data of a file system so that the data is not lost in the absence of power</p>

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Disputed Terms for U.S. Patent No. 5,819,292			
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence
		<p><u>EXTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> • Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. • NetApp reserves the right to rely on any evidence identified by Sun. 	<p><u>Structure</u>: one or more disks with a block-based format (i.e., 4 KB blocks that have no fragments), where the disk storage blocks are the same size as the data blocks of the file system</p> <p><u>EVIDENCE</u>:</p> <ul style="list-style-type: none"> • '292 Patent, Col. 5:49-52; Col. 5:60-8:56; Col. 9:50-11:27; claims 3, 4, 5, 7, 8, 9, 10; Figs. 2, 3, 4A-D, 8, 9A-D, 10, 11A-D, 12, 13B, 15, 17A-J, 21E and accompanying description. • '292 Patent Prosecution History: Amendment and Response filed on or about December 29, 1994, and references cited therein. • '292 Patent Prosecution History: Information Disclosure Statement filed 9/1/1995 and references cited therein. • '292 Patent Prosecution History: Office action mailed February 10, 1997 and references cited therein. • '292 Patent Prosecution History: Submission filed on or about May 7, 1997 and references cited therein. • nonvolatile storage: a storage device which can retain information in the absence of power; a type of storage whose contents are not lost when power is lost. THE IEEE STANDARD DICTIONARY OF ELECTRICAL AND ELECTRONICS TERMS, SIXTH ED. (IEEE Std 100-1996) p. 699. • nonvolatile storage: a storage device whose contents are not lost when the power is cut off. PRENTICE HALL'S ILLUSTRATED

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Disputed Terms for U.S. Patent No. 5,819,292			
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence
			<p>DICTIONARY OF COMPUTING, 2nd Ed. (1995), p. 416.</p> <ul style="list-style-type: none"> • nonvolatile memory: a memory in which the data content is retained when power is no longer applied to it. THE IEEE STANDARD DICTIONARY OF ELECTRICAL AND ELECTRONICS TERMS, SIXTH ED. (IEEE Std 100-1996) p. 699. • nonvolatile memory: a storage system that does not lose data when power is removed from it. Intended to refer to core, ROM, EPROM, bubble memory, or battery backed CMOS RAM, the term is occasionally used in reference to disk subsystems as well. MICROSOFT PRESS COMPUTER DICTIONARY (1991) p. 241; MICROSOFT PRESS COMPUTER DICTIONARY, 3rd ed. (1997) p. 332. • nonvolatile memory: memory chips (such as read-only memory) which retain their information even after the electrical power has been switched off. This contrasts with volatile chips (such as random access memory) which lose their information when the power is switched off. PRENTICE HALL'S ILLUSTRATED DICTIONARY OF COMPUTING, 2nd Ed. (1995), p. 416. • nonvolatile memory: the memory specifically designed to hold information, even when the power is switched off. Read only memory (ROM) is non-volatile, as are all secondary storage units such as disk drives. WEBSTER'S NEW WORLD DICTIONARY OF COMPUTER TERMS, 8th ed. (2000), p. 376.

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Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence
			<ul style="list-style-type: none"> • Testimony by Sun's expert, Dr. McKusick, concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. • Sun reserves the right to rely on any evidence identified by NetApp.
4,8,12-15, 20	"file system"	<p><u>PROPOSED CONSTRUCTION:</u> A system that logically organizes file-related information (such as directories, files and blocks) in a tree structure.</p> <p><u>INTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> • See 9:26-11-27; 11:62-12:8; 15:48-16:9; 20:15-23; Claim 11; Figs. 16, 17A-17D and 22 and accompanying text; Jan. 28, 1995 Amendment and Response at 16. <p><u>EXTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> • Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. • NetApp reserves the right to rely on any evidence identified by Sun. 	<p><u>PROPOSED CONSTRUCTION:</u> "a collection of files and file management structures"</p> <p><u>EVIDENCE:</u></p> <ul style="list-style-type: none"> • '292 Patent, Col. 1:18-20; Col. 2:17-4:44; Col. 5:35-12:37; claims 4, 8, 12-15, 20; Figs. 2, 3, 4A-D, 8, 9A-D, 10, 11A-D, 12, 13B, 15, 17A-J, 21E and accompanying description. • '292 Patent Prosecution History, Amendment and Response filed on or about December 29, 1994, and references cited therein. • '292 Patent Prosecution History, Information Disclosure Statement filed 9/1/1995 and references cited therein. • '292 Patent Prosecution History, Office action mailed February 10, 1997 and references cited therein. • '292 Patent Prosecution History, Submission filed on or about May 7, 1997 and references cited therein. • U.S. Patent No. 7,174,352. • file system: a collection of files. Leffler, McKusick et al., THE DESIGN AND IMPLEMENTATION OF THE 4.3 BSD UNIX OPERATING SYSTEM, (1990), p. 422. • file system: "... collection of files and file

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			<p>management structures on a physical or logical mass storage device..." IBM DICTIONARY OF COMPUTING, 10th Ed. (1993), p. 271.</p> <ul style="list-style-type: none"> ● file system: (1) a collection of files and certain of their attributes. It provides a name space for file serial numbers referring to those files. (2) A collection of files and certain of their attributes. Each file system provides a separate binding of file serial numbers to files. A given file serial number is associated with at most one file in a file system, but it may refer to distinct files in distinct file systems. That is, each file system defines a new <i>name space</i>, giving meaning to the <i>names</i> (file serial numbers) that designate files. <p>THE IEEE STANDARD DICTIONARY OF ELECTRICAL AND ELECTRONICS TERMS, SIXTH ED. (IEEE Std 100-1996), p.407.</p> <ul style="list-style-type: none"> ● Testimony by Sun's expert, Dr. McKusick, concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. ● Sun reserves the right to rely on any evidence identified by NetApp.
8	"state of a file system"	<p><u>PROPOSED CONSTRUCTION:</u> a set of blocks on disk, rooted by a "root inode" (as construed herein), that includes all the blocks required for the data and file structure of a "file system" (as construed herein).</p> <p><u>INTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> ● See 4:6-32; 11:6-27; 11:62-12:38; 17:65-18:7; 18:65-19:12; 20:15-31; 20:63-23:18; 23:58-24:6; 	<p><u>PROPOSED CONSTRUCTION:</u> "a set of storage blocks for that file system that includes all blocks required for the data and structure of the file system"</p> <p><u>EVIDENCE:</u></p> <ul style="list-style-type: none"> ● '292 Patent, Abstract; 4:6-20; Col. 11:6-27; Col. 11:60-12:8; Col. 15:29-17:64; Col. 22:25-23:18; 24:7-9, claim 8; Figs. 16; 17A-L; 20A-C and accompanying description.

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Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence
		<p>Figs. 5-6, 16, 17A-17D and 21A-21F and accompanying text; Jan. 28, 1995 Amendment and Response at 16.</p> <p><u>EXTRINSIC EVIDENCE</u></p> <ul style="list-style-type: none"> • Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. • NetApp reserves the right to rely on any evidence identified by Sun. 	<ul style="list-style-type: none"> • '292 Patent Prosecution History, Amendment and Response filed on or about December 29, 1994, and references cited therein. • '292 Patent Prosecution History, Information Disclosure Statement filed 9/1/1995 and references cited therein. • '292 Patent Prosecution History, Office action mailed February 10, 1997 and references cited therein. • '292 Patent Prosecution History, Submission filed on or about May 7, 1997 and references cited therein. • U.S. Patent No. 7,174,352. • Testimony by Sun's expert, Dr. McKusick, concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. • Sun reserves the right to rely on any evidence identified by NetApp.
8	"marking said blocks of said non-volatile storage means identified in said meta-data as comprising a respective read-only copy of said file system"	<p><u>PROPOSED CONSTRUCTION:</u> Marking data to indicate that said blocks of said non-volatile storage means identified in said meta-data comprise a respective read-only copy of said file system.</p> <p><u>INTRINSIC EVIDENCE</u> See 9:50-10:18; 17:65-23:18; Figs. 17D, 17J and 21E.</p> <p><u>EXTRINSIC EVIDENCE</u> Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent.</p>	<p><u>PROPOSED CONSTRUCTION:</u> Sun contends this phrase does not require construction because the phrase is clear on its face.</p> <p>Alternatively, the Court should construe the phrase to mean: "marking the blocks of the non-volatile storage means that are identified in a block map file to show that the blocks are part of a snapshot"</p> <p><u>EVIDENCE</u></p> <ul style="list-style-type: none"> • '292 Patent, Col. 5:50-60; 9:50-10:18; 12:9-24; 13:2-14; 13:22-14:21; 16:22-41; 18:8-48; 20:15-22;

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Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence
		NetApp reserves the right to rely on any evidence identified by Sun.	<p>20:31-23:19; claims 2, 3, 8; Figs. 2, 3, 4A-D, 5, 6, 7, 11A-D, 16, 17A-D, 22 and accompanying description.</p> <ul style="list-style-type: none"> • Amendment and Response filed on or about December 29, 1994, and references cited therein. • Information Disclosure Statement filed 9/1/1995 and references cited therein. • Office action mailed February 10, 1997 and references cited therein. • Submission filed on or about May 7, 1997 and references cited therein. • U.S. Patent No. 7,174,352 • Testimony by Sun's expert, Dr. McKusick, concerning the meaning of this term to one of skill in the art in the context of its use in the '292 patent. • Sun reserves the right to rely on any evidence identified by NetApp.